

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001300**Date Inspected:** 18-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** Willaim (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** Office, Lift 3 East, Cross Beam #2, Lift 4 East**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Office

Review and organize project documentation. Discuss coating operations and work locations with SMR Skyler Guest.

Lift 3 East

Relocated to transport ship without repairs to internal surfaces being completed, ZPMC also removed the two Suspenders Brackets which were completely bolted to the east side. Visible rust evident on the "T" stiffeners and other locations of the Side and Bottom plates, performed a general walk through with ABF Bill Oak to view required repairs.

Cross Beam #2

Caltrans QA observed ZPMC personnel mark areas which require additional touch up of the internal surfaces of the bolt holes, also checked the Traveler Rail Brackets during in process coating removal on all rejected articles for repairs due to excessive Dry Film Thickness (DFT). Caltrans QA Lumley informed ZPMC QC Don Yao Fei to remove all residual dust prior to re-inspection and subsequent re-application of Interfine 979 Finish coat.

Lift 4 East

East Side Plate repair area was tested for adhesion of re-applied Interzinc 22 and was in excess of 4Mpa. This particular repair was due to amend excessive DFT and non-uniform, poor appearance of previously applied Finish coats.

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## SOURCE INSPECTION REPORT

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### Miscellaneous Metal

Base metal surfaces of approximately 34 pieces of hole covers for lift frame and splice plates and 2 Traveler Rail Brackets were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied. Bracket codes: TR7A-PP 8.5 & TR8A-PP8.5.

### Lift 3 West

West Side Plate and affixed Counterweight and 2 Suspender Brackets were Finish coated with Interfine 979 along the West Line in the Trial Assembly area concurrent and adjacent to on-going fabrication and trial fitting operations.

### Lift 4 East

ZPMC requested inspection for application of "Mist" coat of Interfine 979 aboard the transport ship. Caltrans QA Lumley was walking en-route to perform inspection and received a call stating that ABF QA informing that the operation had been cancelled by ZPMC.

### Lift 4 West

ZPMC personnel applied Finish coat to Bottom Plate including the bolted connection assembly of the Cross Beam Bottom plate and all exposed bolts which were previously coated with Interzinc 22. Tarpaulins were erected around the perimeter of the work area to protect the applied coating from airborne contaminants becoming broadcast into the wet film.

### Lift 2 East

Upper Floor Beam weld repair areas along the longitudinal stiffener at Panel Point #14 were re-abrasive blasted to base metal and an SSPC SP-10 condition edges were feathered and Interzinc 22 re-applied. Profile amplitude was 72, 78, and 81um respectively.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

### Summary of Conversations:

Caltrans QA Lumley inquired with ABF QA Bill Oak as to when repairs to Lift 3 east would commence.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang. (858) 699-9549, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Lumley,James	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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